

Amendments to the Drawings:

Attached are replacement sheets of drawings.

Remarks/Arguments:

The above Amendments and these Remarks are in reply to the Office Action mailed February 4, 2005.

Claims 1-47 were pending in the Application prior to the outstanding Office Action. In the Office Action, the Examiner rejected claims 1-47. Reconsideration of the rejections is requested.

The drawings are objected for being insufficient quality to permit examination. Replacement sheets in compliance with 37 CFR 1.121(d) are sent along with this response. The replacement sheets are believed to be of sufficient quality to allow examination.

Claims 6, 7, 24 and 29 are objected to because of a number of formalities. Claims 6, 7 and 29 have been amended as suggested by the Examiner. Claim 24 has been deleted.

Claims 1-4, 6-8, 10-12, 15, 17-19, 28, 30-32, 34-36, 38-40, and 43 are rejected under 35 USC 102(d) as being anticipated by Mochizuki U.S. Patent 6,386,720. The independent claims 1 and 28 read as follows:

1. (Original): A system comprising:

a group of lamps, the lamps including different colored LEDs so that the lamps can glow with different color light produced by mixing light of different colored LEDs, the lamps including a light guide to spread the light over a larger area; and

a control unit adapted to drive the colors of the lamps in accordance with a video signal.

28. (Original): A system comprising:

a group of lamps, the lamps including LEDs, the lamps including a light guide to spread the light over a larger area; and

a control unit adapted to adjust the intensity of the LEDs in accordance with a video signal.

The Mochizuki reference does not disclose a control unit which adjusts or drives LEDs in accordance with a video signal. Mochizuki describes a backlight system. In a backlight system, light sources, such as LEDs, provide a consistent illumination on the surface of the entire backlight.

Mochizuki in figures 4 and 5 shows an acrylic plate 1, along with a number of LEDs. The LEDs are connected to a controller 1000 which adjusts the LEDs to produce a backlight. As stated in column 4 lines 61-65 of Mochizuki: "In the present embodiment, the light source device 16 adjusts the luminance of each LED in the LED group by the controller 1000, and substantially uniformizes the luminance distribution of the surface illuminant".

The goal of Mochizuki is to produce a backlight with uniform chrominance and luminance. Once that is achieved, no further adjustment need be made to the LEDs. It is set and forget. Other LED backlight units allow for feedback on the performance of the system and for ongoing correction and adjustment. These systems still perform the same function (to maintain uniform chrominance and luminance of the backlight). They just provide it in an ongoing manner with feedback.

In Mochizuki, the intensity of the LEDs are adjusted to produce this uniform luminance distribution at the surface the acrylic plate 1. No video signals are used to adjust the controller. The controller produces a uniform luminance distribution at the surface illuminant. No video signal is used or would be useful. The LEDs are not adjusted with accordance to a video signal. The signal sent by the controller 1000 to the LEDs are used to produce a uniform luminance distribution about the acrylic plate 1. There is no reason nor is it feasible to use a video signal to produce such a uniform luminance distribution. For this reason claims 1 and 28 and their associated dependent claims are believed to be allowable over the Mochizuki reference.

Claims 28, 29 and 45-47 are rejected under 35 USC 102(b) as being anticipated by Brown U.S. Patent 5,184,114.

Brown describes a system as shown in figure 3, in which light from LEDs is sent through a lens 58. The system of Brown does not include a light guide. The lens 58 cannot be considered to be a light guide. Internal reflection is not used or desired in the lens 58 of the Brown device. For this reason, the system of Brown does not anticipate the present claim 28 or its dependent claims.

Claims 1 and 17-19 are rejected under 35 USC 102(e) as being anticipated by Yamazaki et al., U.S. Patent 6,597,348.

Yamazaki describes a display system that uses a backlight which cycles through red, green and blue illumination and operates in sync with an LCD panel. As shown in figure 2 of Yamazaki, the LED backlight does not receive the video signals. Instead, the LCD panel

receives the digital video components. The LED backlight 102 cycles between red, green and blue illumination. The LCD panel 101 uses red, green and blue video signals to block different portions of the LED backlight.

The alternating of red, green, and blue light in order to produce a full spectrum of color for an LCD is actually similar to early color film projection technology. The goal is to alternate the colors of the light so quickly that the eye only perceives a homogenous full color video signal. In Yamazaki's case the position of the film is being taken by the LCD which acts as a light valve allowing only light relating to information in the video signal to get through the LCD and be seen by the viewer. It is thought that the strobing effect will also improve the perception of motion in the LCD panel as it does in film.

In the system of Yamazaki, the intensity of the light sent to the LED backlight 102 is not adjusted in accordance to a video signal. The backlight 102 merely cycles through red, green, blue illumination so the LCD panel can be adjusted to produce the display. For this reason, claim 1 is believed to allowable. Claims 2-19 are dependent upon claim 1 and for that reason are believed to be allowable.

Claim 5 is rejected under 35 USC 103(a) as being unpatentable over Mochizuki in view of Puttman. Claims 9 and 37 are rejected under 35 USC 103(a) as being unpatentable over Mochizuki in view of Lekson et al. Claims 3, 14, 41 and 42 are rejected under 35 USC 103(a) as being unpatentable over Moschizuki in view of Tokunaga. Claims 16 and 44 are rejected under 35 USC 103(a) as being unpatentable over Mochizuki.

None of these references alone or in combinations include a control unit adapted to drive the colors of lamp in accordance with the video signal. Claims 20-25, and 33 are rejected under 35 USC 103(a) as being unpatentable over Brown in view of Puttman.

Claim 20 as amended reads as follows:

20. A system comprising:

- a group of lamps, at least some of the lamps being greater than or equal to 20mm in pixel size and using at least one LED to produce light of different colors, the lamps including a light guide; and
- a control unit adapted to set color of the lamps in accordance with a video signal.

Brown does not include a light guide which is claimed in claim 20 of the present invention. The combination of Brown and Puttman also does not include a light guide and for

that reason claim and its independent claims are believed to be allowable over Brown in combination with Puttman.

Claims 26-27 were rejected under 35 USC 103(a) as being unpatenable over Brown in view of Puttman and further in view of Hue. The combination of these references does not produce the system of claim 20, since Brown in combination with the other references does not disclose the light guide in the lamps

For the above discussed reasons, claims 1-23 and 25-47 are believed to be allowable.

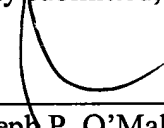
The references cited by the Examiner but not relied upon are not believed to render the claims unpatentable, either singly or in combination.

In light of the above, it is respectfully submitted that all of the claims now pending in the subject patent application should be allowable, and a Notice of Allowance is requested. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting issuance of a patent.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: May 4, 2005

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